

Title (en)

Mechanically and physiochemically effective filtration block for liquid metals and alloys, and process for producing said block.

Title (de)

Filtrationsblock für flüssige Metalle oder Legierungen mit mechanischer und physikalisch-chemischer Wirkung; Verfahren zur Herstellung des vorgenannten Blocks.

Title (fr)

Bloc de filtration pour métaux et alliages liquides à effet mécanique et physico-chimique et procédé de fabrication dudit bloc.

Publication

EP 0014165 A1 19800806 (FR)

Application

EP 80420006 A 19800116

Priority

FR 7902143 A 19790119

Abstract (en)

1. A filtration block for liquid alloys and metals and more particularly for aluminium, magnesium, aluminium-based alloys, and magnesium-based alloys, formed by elements, of which at least the outside part is formed by an active mineral compound, with a mechanical and a physical-chemical effect, and having an open pores structure, characterized in that said block is formed by elements sintered at a temperature which is from 5 degrees to 150 degrees C lower than the melting temperature of the active mineral compound, for a period of from 5 minutes to 1 hour, said active mineral compound being selected from alkali and alkaline-earth metal fluorides, and fluorides of magnesium and aluminium, the melting points of the sintered elements and of the active mineral compound being preferably higher than 800 degrees C and at least higher than the temperature at which the metal or alloy to be filtered is introduced onto the filtration block.

Abstract (fr)

L'invention concerne un bloc de filtration pour métaux et alliages liquides, à effet mécanique et physico-chimique. En agglomérant, par exemple par frittage, des éléments en composé minéral actif à base de fluorures, on obtient une structure poreuse à perméabilité élevée, qui agit à la fois par effet de filtration mécanique et par lavage du métal sous l'action du composé minéral actif qui joue le rôle de flux et assure le piégeage des inclusions. Application à la purification ultime de l'aluminium, des alliages à base d'aluminium, du magnésium, des alliages à base de magnésium.

IPC 1-7

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IPC 8 full level

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CPC (source: EP)

C22B 9/023 (2013.01); **C22B 21/066** (2013.01); **Y02P 10/20** (2015.11)

Citation (search report)

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EP 0014165 A1 19800806; **EP 0014165 B1 19831214**; AT E5602 T1 19831215; BE 881204 A 19800717; BR 8000238 A 19800930; CA 1141538 A 19830222; DE 3065853 D1 19840119; ES 487753 A1 19800616; FR 2446862 A1 19800814; FR 2446862 B1 19810612; GR 73184 B 19840214; IT 1151026 B 19861217; IT 8019232 A0 19800116; JP S5597867 A 19800725; JP S6152220 B2 19861112; MX 154140 A 19870526; NO 155150 B 19861110; NO 155150 C 19870218; NO 800111 L 19800721

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